

Providing Information to the Water Well, Underground Injection Control (UIC) & Underground Hydrocarbon Storage (UHS) Industries in Kansas and other Partners Interested in these Operations, the Environment, Water Resources and Energy

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# SAVE THE DATE

# NEW VENUE



Geology & Well Technology  
Fall 2018 Seminar/Tech Fair

October 9-10, 2018

Lots of Vendors

Holiday Inn Wichita East I-35  
549 S. Rock Road  
Wichita, KS 67207

Details will be posted on our website  
in early June at:  
<http://kdheks.gov/geo>

## Geology & Well Technology Staff 2018

by Deb Biester

Geology and Well Technology Section  
(GWTS)  
Mike Cochran, Section Chief  
Environmental Program Administrator  
(Professional Geologist)



April 19, 2018

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Field Operations, Permit-  
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Vacant, Unit Chief  
Professional Geologist

Water Well and  
Technical Support Unit  
Pam Chaffee, Unit Chief  
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### Meet Our New Underground Injection Control Unit Chief

Hi my name is Carrie Ridley, I am excited to join the Bureau of Water as the new UIC Program Unit Chief in the Geology and Well Technology Section. I am a Licensed Professional Geologist and have 16 years of experience in environmental and geotechnical project management. I have spent the past five and a half years working for KDHE in the Bureau of Waste Management in the RCRA Hazardous Waste Program. I was involved in RCRA Permitting and Corrective Action oversight for soil and groundwater remediation. Prior to that, I worked over ten years for KDOT as an engineering geologist. I earned my B.S in Geology from St. Lawrence University and a M.S. from Kansas State University. I am originally from Northern New York and moved to Kansas to pursue my graduate degree in 2000. I live in central Topeka with my husband and two young children.

## BOW Geologist takes Group of Students on Field Trip to Strataca Salt Museum, OKEOK Facility

by Jessica Crossman, PG

**Jessica Crossman**, a professional geologist in KDHE's Bureau of Water, Geology and Well Technology Section, took a group of students from Topeka Collegiate School to Hutchinson this week, to learn about the salt formation that underlays that part of the state and how the salt is used in Kansas.

The group visited Strataca, the Kansas Underground Salt Museum, and learned how the salt formation formed 275 million years ago. The students went 650 feet underground, into the salt formation and even got to bring a few pieces of the salt home with them.

The students learned about the different ways the salt is produced and used. The salt from the hard rock mine, where the museum is located, is used mostly for road salt.

The salt that we eat on our food, is produced by solution mining, where fresh water is injected through a well, into the salt formation and saturated brine is pumped out and then filtered, treated and dried.

Following the museum visit, Jessica took the group to the ONEOK Hutchinson Fraction and Storage facility.

At ONEOK, the students learned about how raw feed natural gas liquids come into the facility and are then "sorted" or broken down into different natural gas products, such as propane and butane. Those products are then stored in voids called caverns, created in the same salt formation that the group had been inside when they were at the museum.

The students also learned about some of the monitoring and testing that is required by KDHE regulations that help to keep the operation of these storage caverns safe for everyone.



*A group of students from Topeka Collegiate School took a trip with KDHE Bureau of Water geologist Jessica Crossman to Hutchinson to tour Strataca, the Kansas Underground Salt Museum, and the ONEOK Hutchinson Fraction and Storage Facility.*





## GWTS Staff have outside hobbies . . .



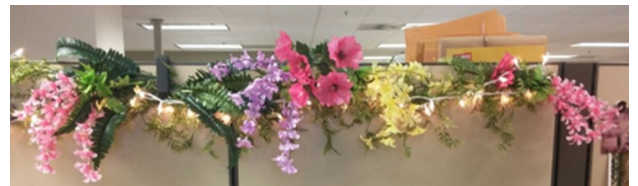
Grape hyacinths, a few daffodils and a tulip are in bloom at Mike Cochran's house. Yes, and the remains of a ferocious dinosaur !



Guests receive a beautiful "Welcome" as they drive up to Mike Cochran's House



Beautiful flowering tree at Deb Biester's House



It was taking so long for "Spring" to arrive that we actually started our indoor garden at work to tide us over !!!



## **TIMELINE FOR THE KANSAS WATER WELL CONTRACTORS RENEWAL PERIOD 2018-2019**

**by Deb Biester**

Kansas water well contractors renewing their water well licenses for the renewal period July 1, 2018 through June 30, 2019, will be facing stricter deadlines due to lack of resources and to ensure uniform application of the requirements for all contractors. In past renewal periods, approximately three-quarters of the water well contractors have had their renewal contractor and rig apps, along with associated fees and their Continuing Education Credits completed and turned in to KDHE before the expiration date of their license, which is June 30 each year. The remaining one fourth of the contractors do not meet this deadline.

### **Important deadlines for the 2018-2019 renewal period are:**

- |                      |  |
|----------------------|--|
| <b>May 15, 2018</b>  | Water Well Renewal Letters, Contractor Renewal Applications, and Rig Applications will be mailed out to contractors                                |
| <b>June 11-22</b>    | Kansas Ground Water Association (KGWA) will mail to KDHE Completion Forms of those contractors who have completed their Continuing Education Units |
| <b>June 30, 2018</b> | Kansas Water Well Contractor License and Drilling Rig Licenses Expire  |

All contractors need to have their applications and fees into KDHE by July 1, 2018. If these requirements are not met, the license can be revoked under K.S.A. 82a-1209. Valid, emergency type situations will be considered.

**July 1-31, 2018** KDHE will process renewals as quickly as possible.

If you have completed your CEUs, paid for them and submitted your applications and fees to KDHE, you will be allowed to continue working as usual while your licenses are being processed. Upon receiving your fees, KDHE is required to deposit them within a few days. We will not be able to hold on to your fees (in the event we are waiting on paperwork or CEUs etc) and the fees are not reimbursable.

**August 1, 2018** KDHE will start Revocation Letters which will be mailed out in August, 2018.

Please see Page 11 of this newsletter for a newly developed Procedure WWP-12, **PROCEDURE FOR RENEWING A KANSAS WATER WELL CONTRACTOR LICENSE**.



Reply to: (785) 296-5524  
Bureau of Water  
Geology & Well Technology Section  
1000 S. W. Jackson, Ste. 420  
Topeka, KS 66612-1367

## PROCEDURE FOR RENEWING A KANSAS WATER WELL CONTRACTOR LICENSE

### Procedure #: WWP-12 (10/16)

#### Narrative:

The purpose of this procedure document is to outline the process for renewing your Water Well Contractor's License issued by the Kansas Department of Health and Environment. Pursuant to Kansas Statutes K.S.A. 82a-1209, after becoming a Licensed Water Well Contractor, the contractor may renew their license annually if they wish to continue drilling water wells. The term of all licenses issued under the provisions of this act shall be July 1 of each year through the following June 30.

If one has access to the internet, it is recommended that one first go to the Kansas Department of Health and Environment Geology & Well Technology Section website at <http://www.kdheks.gov/geo> to learn more about the Geology & Well Technology Section in which the Water Well Program is located. Then, it is recommended that one go to the Water Well Program website at <http://kdheks.gov/waterwell/index.html> to become familiar with the information available concerning the KDHE Water Well Program.

#### Procedure:

1. KDHE, Bureau of Water, GWTS will mail hard copies of the Water Well Contractor Renewal Letter, Renewal Application for Kansas Water Well Contractor License (WWC-1R) and Application for Kansas Water Well Contractor Drilling Rig Licenses (WWC-3) approximately May 15 or whichever date the first Monday falls on after May 15.
2. Pursuant to K.S.A. 28-30-3(c), each water well contractor or the contractor's designated person shall earn at least eight units of continuing education approved by the Kansas Ground Water Association who administers this program for the KDHE Secretary. You will find information at their website listed below. Please register and pay for your CEU's at the following address:

Continuing Education Committee  
Attn: Dale Hayse  
c/o KGWA, P.O. Box 107  
Mullinville, KS 67109-0107

Phone: 620.548.2669  
E-mail: [Haysemtg@Havilandtelco.com](mailto:Haysemtg@Havilandtelco.com)  
Website: <http://kgwa.org/>

3. **Prior to July 1**, please send the items mentioned above in #1 (sent to you by KDHE in May) along with \$100.00 fee for contractor license and \$25.00 fee for each rig you register. Please fill out the renewal application and rig application completely, show the number and what type of wells you constructed, reconstructed and plugged, list your drillers and make sure you sign your app and check. Incomplete forms and/or no signatures will delay processing your license(s). Mail applications and fees to:

Kansas Department of Health & Environment  
Attn: Deb Biester  
1000 SW Jackson Street, Suite 420  
Topeka, KS 66612-1367

Phone: 785-296-5524  
E-mail: [Debra.Biester@ks.gov](mailto:Debra.Biester@ks.gov)  
Website: <http://kdheks.gov/geo>

4. Pursuant to K.S.A. 82a-1206(d), if you are registering as a "Corporation", you must register with the Secretary of State and be in "Good Standing" with their office before KDHE can issue a license.  
<http://www.kssos.org/business/business.html>

Once the above items have been completed and approved, KDHE will issue the contractor and drilling rig licenses. The license number is to be displayed on each drilling rig. If these requirements are not met by July 1, the license shall be revoked under K.S.A. 82a-1209.

**Water Well Program  
Upcoming Opportunities for CEUs  
by Pam Chaffee, PG**

There are a number of upcoming opportunities for Kansas Water Well Contractors to get training to meet their eight (8) continuing education units (CEUs) that are required to renew their license beginning with the first full year of licensure or the renewal period. CEUs must be processed through the Kansas Ground Water Association (KGWA). Information is available on the new KGWA website at <https://kgwa.org/>. Contact Dale Hayse, KGWA Executive Director, at Hayse Management Services, P.O. Box 107, Mullinville, KS, 67109, or at 620-548-2669, or at [ksgroundwater@gmail.com](mailto:ksgroundwater@gmail.com).

The **2018 Annual KGWA Spring Seminar and Well Drilling Demonstration** will be held on Friday 27 April 2018 in Colby, Thomas County, KS, where rehabilitation of an irrigation well will be demonstrated and will include pulling the turbine pump, video-taping the well's interior, and installation of a casing liner. Industry topics and a KDHE update will also be presented. The registration form is at: <https://kgwa.org/events/>.

**National Groundwater Association** (NGWA) regularly provides updates on upcoming groundwater events and education opportunities. Visit the following link on their website: <http://www.ngwa.org/Events-Education/Pages/calendar.aspx>.

**NGWA's WellOwner.org** website lists lessons & webinars at: <http://wellowner.org/well-owner-lessons/>.

**Private Well Class** webinar, *Is My Water Safe to Drink? – Common Questions about Private Wells*, May 15, 2018 at 1 p.m. CT. Register at: <http://privatewellclass.org/safe>. Other webinars & events are listed at: <http://privatewellclass.org/calendar>

The **WorldWide Drilling Resource Magazine** is available both by email and in print. Upcoming educational events are provided online in their *April 2018 E-News Flash* at <http://www.icontact-archive.com/zvi55WNmFZoWtOU2VElwX8pX0bc6nszp?w=4>.

Links to information on surrounding state groundwater association activities include:

Oklahoma: <https://www.okgroundwater.org/>;

Colorado: <https://www.cgwa.co/events-1/>;

Nebraska: <http://www.nebraskawelldrillers.org/>; and

Missouri: <http://www.missouriwaterwellassociation.com/>.

## Water Well Testing

KDHE Certified Laboratories Listing can be found at the following website:

<http://www.kdheks.gov/envlab/disclaimer.html>



## Disposal Well Treatment by Mike Cochran, PG

Class I industrial wastewater disposal wells require sophisticated equipment and procedures for testing and maintenance purposes. When a well starts experiencing a reduction in injection capacity, that is the well is no longer taking wastewater at an acceptable rate on gravity feed, then it may be necessary to clean out the open hole wellbore and treat the injection formation to remove any blockage of the disposal formation. One method of cleaning out a well is to conduct a nitrogen jetting and acid treatment. The acid removes material that is plugging the disposal formation face that exposed in the open borehole and the nitrogen jetting removes the solids from the well. These treatments improve the injection capacity of the well.







## ***KDHE OFFICES WILL BE CLOSED ON THE FOLLOWING DAYS...***

May 28, 2018	Memorial Day
July 4, 2018	Independence Day
September 3, 2018	Labor Day
November 12, 2018	Veterans Day
November 22, 2018	Thanksgiving Day
November 23, 2018	Thanksgiving Day
December 24, 2018	Christmas Eve
December 25, 2018	Christmas Day

## **Web News**

The following changes have recently been made to the Geology and Well Technology Section Web site:

**Geology (<http://kdheks.gov/geo>)**  
 Updated Index Page  
 Updated Organizational Chart

**UHS (<http://kdheks.gov/uhs>)**  
 Updated Index Page  
 Revised MIT Form

**UIC (<http://kdheks.gov/uic>)**  
 Updated Index Page

**Water Well (<http://kdheks.gov/waterwell>)**  
 Updated Index Page  
 Flush Mount Well Construction Detail  
 Updated Active KS Water Well Contractor List  
 WWP-5  
 WWP-10  
 Standard Monitoring Well Design

E-mails were updated throughout all web docs.

## ***Did You Know... ???***

Did you know these interesting facts about salt? From the Salt Institute.

- We will never run out of salt. World usage is estimated at 240 million metric tons per year. The United States reserves are estimated at 55 trillion metric tons.
- The United States and China lead the world in salt production.
- Salt has been found on meteors that have crashed to earth.
- A 10 percent salt solution lowers the freezing point of water to 20 degrees Fahrenheit while a 20 percent solution will not freeze until 2 degrees Fahrenheit.
- Highway deicing accounted for about 44% of total salt consumed in the United States.

# Don't get left behind...

## Jump on the KOLAR Express



### KANSAS ON-LINE AUTOMATED REPORTING

by Deb Biester and Pam Chafee, PG

In 2009, the Kansas Department of Health and Environment (KDHE), Bureau of Water, Geology Section and the Kansas Geological Survey (KGS) began discussing the use of KOLAR for submitting water well records by Kansas licensed water well contractors. Fifty-eight contractors were registered when the first water well record (WWC-5 Form) and fee payment were submitted via KOLAR on September 12, 2011. The first water well plugging record (WWC-5P Form) was submitted via KOLAR on June 24, 2014. As of April 24, 2018, ninety-eight contractors have registered to use KOLAR.

Only Kansas licensed water well contractors can use KOLAR and they must be registered by KDHE. Instructions for registering are available on the Water Well Program website at: <http://www.kdheks.gov/waterwell/index.html>, at the link under KOLAR, under the heading **WWC-5/WWC-5P Forms**. The link <http://kolar.kgs.ku.edu> is used to start the registration process.

To submit a record for water well construction or reconstruction, select WWC-5 Form, or to submit a plugging record select WWC-5P Form. The location of the well must first be entered as latitude and longitude coordinates in decimal degrees, and the horizontal datum (WGS84, NAD83, or NAD27), must be selected for the source of the coordinates. KOLAR then automatically completes the portions of the record that report the location of the well (county, section, township, range, and four quarter fractions). Be sure the lat/long coordinates used are correct or the well will be incorrectly located.

Once the location information is entered, then completion of the form can proceed and KOLAR provides guidance along the way. The user is warned when information is required to be entered, or is questionable or invalid. It also shows associated fields that must be completed based upon previously entered information about the well.

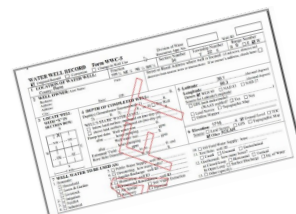
Any errors that would prevent submission of the form will be identified and the user can continue editing until the problems are resolved and submission can be completed. Form submission is quick and easy.

Well record reporting via KOLAR requires online payment by credit card. Payment fees are \$7.00 for the first well construction record and \$6.50 for each additional record when several are submitted together. Conventional filing of water well records requires \$5.00 fee payment for each well construction record and expenses for mailing (postage and envelope). Remember - record fee payment is only required for new well construction. There is no charge for records reporting reconstruction or plugging of water wells.

Questions and requests for assistance in using KOLAR can be submitted to Pam Chaffee or Deb Biester at KDHE, or to the KGS KOLAR staff by using the Help tab.

**SO ALL ABOARD...CLICK TODAY...**

**AND SIMPLY YOUR LIFE**



Instructions for registering to use KOLAR and how to use it are provided at:

[http://www.kdheks.gov/waterwell/download/KOLAR Instructions by Kurt Look KGS 1-19-2012.pdf](http://www.kdheks.gov/waterwell/download/KOLAR%20Instructions%20by%20Kurt%20Look%20KGS%201-19-2012.pdf)

Questions: Call Pam Chaffee at 785-296-3565 or Deb Biester at 785-296-5524

**KANSAS  
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**<http://kdheks.gov/geo>**



## **UNDERGROUND NEWS**

**Kansas Department of  
Health and Environment**

**Prepared & Distributed by  
Bureau of Water - Geology & Well Technology Section**

**Direct inquiries and opinions to:  
KDHE - BOW  
Underground News  
1000 SW Jackson, Suite 420  
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**MEMBER:**



***KDHE's Mission is to Protect and Improve the  
Health and Environment of all Kansans***